

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated in the following listing of claims. This listing replaces any previous listing of the claims.

1. (Currently Amended) An active material for a positive electrode of a lithium secondary battery, comprising a lithium-nickel composite oxide of the general formula $\text{Li}_x(\text{Ni}_{1-y}\text{Co}_y)_{1-z}\text{M}_z\text{O}_2$, where:

$$0.98 \leq x \leq 1.10;$$

$$0.05 \leq y \leq 0.4;$$

$$0.01 \leq z \leq 0.2; \text{ and}$$

M is chosen from at least one element ~~selected from the group of~~ among Al, Zn, Ti, and Mg~~[[:]]~~, wherein~~[[:]]~~ the active material is optionally subject to a washing process so that the difference between the specific surface area of the active material before the washing process and after the washing process is $1.07 \text{ m}^2/\text{g}$ or less.

~~a. according to Rietveld analysis, the Li site occupancy rate for Li sites in a crystal of the lithium-nickel composite oxide is 98% or greater;~~

~~b. the average particle size of spherical secondary particles of the lithium-nickel composite oxide ranges from $5 \mu\text{m}$ to $15 \mu\text{m}$; and~~

~~c. when the active material is subjected to a washing process, the difference between the specific surface area of the active material before the washing process and after the washing process is $1.07 \text{ m}^2/\text{g}$ or less.~~

2. (Cancelled)

3. (Previously Presented) A lithium secondary battery comprising a positive electrode comprising the active material claimed in claim 1 ~~for the positive electrode~~.

4. (New) The active material of claim 1, wherein the lithium-nickel composite oxide has a Li site occupancy rate for Li sites in a crystal of the lithium-nickel composite oxide of 98% or greater.

5. (New) The active material of claim 1, wherein the lithium nickel composite oxide comprises spherical secondary particles having an average particle size ranges from 5 μm to 15 μm .

6. (New) A method for manufacturing an active material for a positive electrode of a lithium secondary battery, comprising:

obtaining spherical secondary particles of a nickel composite hydroxide;
adding a compound containing M to the nickel composite hydroxide to obtain a first mixture;
adding a lithium hydroxide to the first mixture to obtain a second mixture;
heating the second mixture in the presence of oxygen so that the second mixture sinters; and
crushing the sintered second mixture to obtain a powder,
wherein M is chosen from at least one element among Al, Zn, Ti, and Mg.

7. (New) The method of claim 6, wherein the average particle size of the spherical secondary particles ranges from 5 μm to 15 μm .

8. (New) The method of claim 7, wherein the lithium-nickel composite oxide has a Li site occupancy rate for Li sites in a crystal of the lithium-nickel composite oxide of 98% or greater.